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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,027	08/06/2003	Kazuhiro Takeuchi	0171-0999P	6968

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EXAMINER

SANDERS, KRIELLION ANTIONETTE

ART UNIT PAPER NUMBER

1714

DATE MAILED: 03/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/635,027

Applicant(s)

TAKEUCHI ET AL.

Examiner

Kriellion A. Sanders

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12/27/05.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 6-12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Kani, US Patent No. 5,098,758.

This rejection is repeated for reasons of record.

Applicant's invention pertains to a molded friction material derived by curing a composition of a non-asbestos fibrous base, a binder, a filler, and an abrasive that includes zirconium silicate beads.

Kani discloses a resin mold clutch facing that is heat-molded from a resin mold base member that forms a friction face, and a backup member.

The resin mold base member consists essentially of a matrix composed of a glass fiber and an aromatic polyamide fiber, an inorganic filler, a solid lubricant, and a resin binder.

The backup member consists essentially of a matrix composed of a glass strand or yarn and at least one strand or yarn selected from a group consisting of a rayon strand or yarn and an aromatic polyamide strand or yarn, and a binder adhered to the matrix, and is shaped in an spirally wound configuration.

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As the inorganic filler constituting the resin mold base member, two types of fillers, i.e., a soft filler such as calcium carbonate and a hard filler such as zirconium silicate, may be used.

The average grain diameter of the zirconium silicate hard filler is from 50 to 500 micrometers.

The content of the inorganic filler ranges from 5 to 15 volume % based on the total volume of the resin mold base member. See col. 2, line 53 through col. 5, line 43.

Each of applicant's claim limitations are clearly met by the reference.

Applicant's arguments filed 12/27/2005 have been fully considered, but have not been found to be persuasive.

Applicant argues that the friction material of Kani must have the shape of the friction material set forth in the comparative examples of his specification and consequently contribute to larger mating surface wear and poor noise performance. This argument is unsubstantiated by concise data and is based on limitations that are not present in the claims. Applicant's claims recite "zirconium silicate beads having an average particle size of 15 to 500 um". Kani discloses silicate grains having a diameter of 50 to 500 um. They are used in amounts of 5 to 25 volume %. See col. 2, line 53 through col. 4, line 3. No patentable difference is readily ascertained between present and patented inventions. Applicant's use of the term, "comprising" does not preclude the inclusion of other elements such as the calcium carbonate filler of Kani. It is not possible to correlate the comparative data of applicant's specification with the compositions of Kani, since the comparison is unsubstantiated by concise data.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 3-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kani US Patent No. 5098758 as applied to claims 1, 3 and 6-12 above and further in view of Kani US Patent No. 4777193.

4. Kani '193 states that known conventional resin molded type compositions of frictional material for use in clutches include compositions containing inorganic fibers such as asbestos, glass fibers and the like, an inorganic filler such as barium sulfate, graphite and the like, metals such as *copper* and brass, and a binder such as melamine resin, phenolic resin, etc. See col. 1, lines 12-21.

5. It is an obvious variation to one of ordinary skill in the art to include copper in the fibrous base material of a friction element such as taught by Kani '758, since copper and other metals are taught to be conventional components.

6. The rejection over EP 1031754 is withdrawn.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kriellion A. Sanders whose telephone number is 571-272-1122.

The examiner can normally be reached on Monday through Thursday 6:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Kriellion A. Sanders  
Primary Examiner  
Art Unit 1714

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